

ABSTRACT OF THE DISCLOSURE

A telerobotic nozzle positioning system for a mobile debris vacuum vehicle or for fixed particulate vacuuming applications. The apparatus has a vacuum source coupled to an adjustable boom and nozzle assembly. The nozzle assembly is mounted to the boom with a compliant upper joint that will allow the nozzle assembly to withstand impacts with obstructions without shearing the nozzle assembly from the boom. A base with an extensible fly is pivotally coupled to the upper joint and can swing with respect to the joint upon actuation of a short stroke hydraulic cylinder. The distal end of the extendable fly has a nozzle bracket assembly with a nozzle bracket, flexible hose and nozzle tip. The nozzle bracket and nozzle tip can pivot with respect to the fly. A pair of long hydraulic cylinders allows the extension of the fly from the base as well as rotation of the nozzle bracket and tip.